Title (en)

CATHETER FOR IMPROVED ABLATION

Title (de)

VERBESSERTER ABLATIONSKATHETER

Title (fr)

CATHÉTER D'ABLATION AMÉLIORÉ

Publication

EP 2330997 A2 20110615 (EN)

Application

EP 09790135 A 20090708

Priority

- US 2009049877 W 20090708
- US 17379408 A 20080715

Abstract (en)

[origin: US2010016848A1] An ablation electrode is mounted on the distal end of a catheter with a first portion inside and a second portion outside the catheter. The second portion is adapted to have a surface that makes maximum contact with a tissue to be ablated, leaving a minimum area not covered by the tissue and potentially exposed to blood. The first portion is adapted to provide an extended surface area for efficient exchange of heat with a coolant flowing inside the catheter. Outlets provided near the area not covered by the tissue in the second portion prevents blood from getting close to or come directly in contact with the area, thereby greatly reducing formation of dangerous blood clots. The minimizing of an electrical circuit through blood greatly reduces wasted power into the electrode so that the efficiently cooled electrode is not burdened. The catheter preferably has multiple electrodes with similar features.

IPC 8 full level

A61B 18/14 (2006.01)

CPC (source: EP US)

A61B 18/1492 (2013.01 - EP US); A61B 2018/00029 (2013.01 - EP US); A61B 2018/00214 (2013.01 - EP US); A61B 2018/00351 (2013.01 - EP US); A61B 2018/00577 (2013.01 - US); A61B 2018/00702 (2013.01 - EP US); A61B 2018/00791 (2013.01 - EP US); A61B 2018/00839 (2013.01 - EP US); A61B 2018/00898 (2013.01 - EP US); A61B 2018/1475 (2013.01 - EP US); A61B 2218/002 (2013.01 - EP US)

Citation (search report)

See references of WO 2010008975A2

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO SE SI SK SM TR

Designated extension state (EPC)

AL BA RS

DOCDB simple family (publication)

US 2010016848 A1 20100121; **US 8882761 B2 20141111**; CA 2730625 A1 20100121; CA 2730625 C 20180710; CN 102119009 A 20110706; CN 102119009 B 20130911; CN 103462687 A 20131225; CN 103462687 B 20160504; EP 2330997 A2 20110615; EP 2330997 B1 20180110; EP 3308732 A2 20180418; EP 3308732 A3 20180627; EP 3308732 B1 20210120; JP 2011528266 A 20111117; JP 5770628 B2 20150826; US 10709499 B2 20200714; US 10709501 B2 20200714; US 2015066017 A1 20150305; US 2017319274 A1 20171109; US 2019159836 A1 20190530; US 9717558 B2 20170801; WO 2010008975 A2 20100121; WO 2010008975 A3 20100520

DOCDB simple family (application)

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